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STUDIES IN THE HELIANTHEAE (ASTERACEAE). XXXI. ADDITIONS TO THE GENUS *DIMEROSTEMMA*

Harold Robinson

Abstract.—Eleven species are recognized in the South American genus *Dimerostemma* including two species, *D. grazielae* and *D. virgosum* described as new and three species, *D. annuum, D. episcopale* and *D. humboldtianum* newly transferred from *Oyedaea.* A key to species and a listing of synonymy and specimens seen is provided.

The Helianthean genera have traditionally been more accurately circumscribed than those of most tribes of the Asteraceae because of the presence of many obvious characters that mark natural groups. The members of the helianthean subtribe Ecliptinae have not been as fortunate as most others in the tribe, however, and the members of that subtribe in Brazil have been particularly afflicted since generic concepts applied in the area by traditional systems of classification are almost entirely typified by species far outside the borders of Brazil.

The genus *Dimerostemma* is a particularly good example of the problem. The genus was named by Cassini in 1817 on the basis of a single Brazilian species, but was retained in the traditional treatments of the tribe by Bentham (Bentham and Hooker 1873) and Hoffmann (1890–1894) primarily because of lack of information. Most material of the genus was actually placed in the broad traditional concept of *Oyedaea* on the basis of the sterile ray flowers and the marginally winged achenes. The Gardner genus *Serpaea,* lectotypified by the same species as Cassini's genus, came to be treated as a subgenus of *Oyedaea* in the traditional treatments.

When Blake (1917) revived the genus *Dimerostemma,* he recognized six species, five from central Brazil (Goiás, Minas Gerais, and Mato Grosso) and one from adjacent eastern Bolivia. Blake, in distinguishing the genus from *Oyedaea,* emphasized the rather quadrangular disk achenes, the lack of squamellae in the pappus between the awns, and the presence of a distinct outer involucral bract series of foliar nature. Of these characters, the squamellae were evidently considered most significant by Blake, since he separated many other genera on this basis.

Dimerostemma, as delimited by Blake, was suspect on a number of counts. The quadrangular nature of the disk achenes represents only a thickened form shaped by the confines of the florets in the head. The squamellae have proven an unreliable character in many other Heliantheae such as *Otopappus* and *Notoptera,* or *Rhysolepis.* Also, at the time of the recent description of two new Brazilian species, one technically a *Dimerostemma* and the other an *Oyedaea,* Robinson (1981) noted the many characters in common between the species and suggested that a future concept would place the two together. The one character mentioned by Blake that remains potentially useful is the differentiated foliate outer involucre, but it is notable that a differentiated outer involucre is present in the Brazilian species that Blake left in *Oyedaea* as well as in those he placed in *Dimerostemma.*

In the process of studying material of another undescribed Brazilian species closely related to that recently described in *Oyedaea,* additional characters have been noted that impel the abandonment of the unnatural generic concept and mandate the expansion of *Dimerostemma* to its natural limits. In the present effort, some of the species that have been placed in *Oyedaea* from Guatemala and Mexico are provisionally excluded (Robinson 1978), and the genus is considered to be a strictly Andean group having a type-species, *O. verbesinoides,* ranging westward into Panama and Costa Rica. These plants can be distinguished from the expanded concept of *Dimerostemma* in the following ways:

Oyedaea	*Dimerostemma*
1. Corollas narrowly funnelform above basal tube.	Corollas campanulate and cylindrical above short basal tube.
2. Outer surface of corolla lobes scabrid with numerous sharp-tipped hairs.	Outer surface of corolla lobes not or scarcely scabrid.
3. Inner surface of corolla lobes with numerous long papillae distinctly longer than wide.	Inner surface of corolla lobes with mamillae or short papillae.
4. Resin ducts of corolla throat obvious, broad.	Resin ducts of corolla throat narrow, usually indistinct.
5. Style branches laxly recurved when mature.	Style branches becoming strongly coiled or contorted.
6. Anther collar only slightly narrowed at upper end, scarcely offset outwardly from base of connective.	Anther collar abruptly and strongly narrowed above to less than ⅓ its width, forming distinct basal tube.
7. Style branches without evident capitate glands on back.	Style branches usually bearing numerous glands on back.
8. Involucre without sharply differentiated outer series of foliose bracts.	Involucre with sharply differentiated outer series of foliose bracts.
9. Pappus awns slender above base, rather terete.	Pappus awns stout and tapering, triquetrous, sometimes lacking.
10. Body of achene constricted above into neck.	Body of achene not constricted above into neck.
11. Andean.	Brazil, Paraguay, and eastern Bolivia.

The genus *Dimerostemma,* as presently conceived, includes all species in the area of Brazil that have traditionally been placed in *Oyedaea.* The relationship to the Andean *Oyedaea* is probably more remote than the traditional placement of the species would suggest, although a slight enlargement of the anther collar, of the type seen in *Dimerostemma,* has been noted in one Bolivian specimen of *O. lanceolata* (Rusby) Blake. Also, both genera lack the fiber sheaths along the veins of the corolla throat seen in many other Ecliptinae. Still, actual closest relationship of *Dimerostemma* appears to be to other species in Brazil that have

been placed in *Angelphytum* and *Zexmenia* which have the same general corolla characters, expanded anther collars, and contorted style branches. The latter groups differ from *Dimerostemma* primarily by the fertile rays or peripheral flowers and by the lack or near lack of distinct foliose outer involucral bracts. Sterility versus fertility of the ray flowers, used here in conjunction with the involucre, seems to define a natural group, but the character does vary in other members of the Heliantheae and cannot automatically be regarded as a generic distinction.

The species of *Dimerostemma* show a comparative uniformity, being plants of savanna-type habitats, but some significant variation is seen in the genus. Most species seem to possess a xylopodium. Still, such a structure is not mentioned in collection data for *D. episcopale* or the closely related new species. The slender shrubby habit of the latter two species is sufficiently different to suggest that a xylopodium is not present. Most of the species have numerous glands on the backs of the style branches, but these are lacking in specimens seen of *D. humboldtianum,* where they are evidently a lost character. Though all members of the genus have a distinct outer series of involucral bracts, the shapes of the bracts differ. The species placed in *Dimerostemma* by Blake (1917) have broad and suborbicular bracts, while the bracts in the *D. episcopale* and *D. humboldtiana* groups are narrow and usually elongate.

Key to the species of *Dimerostemma*

1. Bracts of differentiated outer involucral series oblong to linear; pappus with large squamellae between the awns 2
   2. Small branching shrubs without obvious xylopodium; style branches with numerous glands abaxially 3
      3. Differentiated outer involucral bracts oblong, scarcely longer than inner bracts; paleae with mostly rounded tips ..... *D. episcopale*
      3. Differentiated outer involucral bracts linear, much longer than inner involucral bracts; paleae with pointed tips ..... *D. grazielae*
   2. Plants erect and scarcely branched, with an obvious basal xylopodium; style branches without numerous glands abaxially 4
      4. Leaves broadly elliptical to oblong, distinctly narrowed to a short petiole 1–3 mm long ..... *D. humboldtianum*
      4. Leaves narrowly elliptical to narrowly oblanceolate, with a long slender base ..... *D. annuum*
1. Bracts of differentiated outer series broadly ovate to suborbicular; pappus without large squamellae between the awns 5
   5. Plants much-branched with mostly pseudodichotomous branching, without obvious xylopodium ..... *D. virgosum*
   5. Plants erect and scarcely branched, with obvious basal xylopodium . 6
      6. Leaves ovate with acute to slightly acuminate tips; achene without evident wing ..... *D. bishopii*
      6. Leaves mostly rounded with obtuse or rounded tips; achenes usually winged 7
         7. Plants greenish in aspect, with slight strigillose or appressed-puberulous pubescence; leaves alternate ..... *D. retifolium*

7. Plants cinereous with longer or spreading hairs; leaves opposite below 8
   8. Heads with distinct slenderly acuminate tips on paleae .... *D. rotundifolium*
   8. Heads with short-acuminate or acute tips on paleae 9
      9. Heads usually numerous on branches, usually less than 1.5 cm wide, usually with narrow flexuose peduncles ... . *D. brasilianum*
      9. Heads few or solitary on branches, usually 1.5–3.0 cm wide, born on stout peduncles 10
         10. Undersurfaces of leaves and outer involucral bracts usually densely velutinous to tomentose with soft flexuose hairs; heads born on branches that are leafy nearly to the head ..... *D. vestitum*
         10. Undersurfaces of leaves and outer involucral bracts incompletely covered by pubescence, mostly hispid or pilosulous; heads usually born on elongate leafless peduncles ..... *D. asperatum*

The following eleven species are recognized, including three transferred at this time from *Oyedaea* and two described as new. Because of some previous misidentifications of material in the genus, specimens in the U.S. National Herbarium are cited below to indicate their correct identity and at the same time give some indication of the distribution.

Dimerostemma annuum (Hassler) H. Robinson, comb. nov.

Oyedaea annua Hassler, Repert. Nov. Sp. 14:175. 1915. PARAGUAY: In campis rupestribus calcareis in regione collis "Margarita." *Hassler 11030* (G, Photo US).

The species apparently is known only from the type. Appearance would suggest that relationship is closest to *D. humboldtianum.*

Dimerostemma asperatum Blake, Contr. Gray Herb. n.s. 52:12. 1917

BOLIVIA: East Velasco, 200 m, Jul 1892, *O. Kuntze* (Holotype US). More recent collections: BRAZIL: Distrito Federal: Cerrado, immediately south of Brasília, elev. 975 m. *Irwin, Souza & Reis dos Santos 11112*; Campo, north end of Lagôa Paranoá, Brasília, elev. 975 m. *Irwin, Grear, Souza & Reis dos Santos 13950*; 46 km N of the bridge at Asa Norte in Brasília on the dirt road to Vila Buritis, elev. 3100 ft. *King & Almeda 8224*; Vicinity of the University of Brasília campus, elev. 2700 ft. *King & Almeda 8230*; Ecological Reserve S of Brasília, elev. 3300 ft. *King & Bishop 8921, 8927*; Chapada da Contagem, 13 km nordeste de balão em BR 020 por estrada, 20.5 km nordeste de torre de televisião, Brasília. *Kirkbride & Kirkbride 3098*; Goiás: Luziania (Saida da cidade). *Heringer 18198*; Campo, ca. 2 km N of Cristalina, elev. 1250. *Irwin, Grear, Souza & Reis dos Santos 13294*; 2 km S of Cristalina, elev. 2400 ft. *King, Almeda & Eiten 8256*; 13 km N of Cristalina along road to Brasília, elev. 2800 ft. *King & Bishop 8951.*

The species seems most notable for the large usually solitary heads on elongate leafless peduncles. The Bolivian type seems superficially different in appearance, but this is apparently because of the poor condition of the specimen. After careful examination I have found no essential difference.

Dimerostemma bishopii H. Robinson, Phytologia 49:275. 1981

BRAZIL: Goiás: 68 km NW along road from Iaciara to Nova Roma, elev. 1400 ft. *King & Bishop 8803* (Holotype UB, isotype US).

The species can be distinguished by its broad sharply acute to slightly acuminate leaves and by the lack of wings on the achenes. The lack of wings was passed over too lightly at the time the species was described, being a feature unique in the entire related group of *Dimerostemma* and *Angelphytum,* and a character that might cause the species to be placed in *Aspilia* according to more traditional concepts. Nevertheless, the species has all other characters of *Dimerostemma* and lacks any trace of the apical narrowing of the achene or the fiber sheaths in the throat of the corolla that are found in most species of *Aspilia* including all those seen from Brazil.

Dimerostemma brasilianum Cassini, Bull. Soc. Philom. 1818:58. 1818. *Serpaea ovata* Gardn., Lond. J. Bot. 7:296. 1848. *Oyedaea ovata* (Gardn.) Benth. ex Baker in Mart., Fl. Bras. 6(3):207. 1884. *Oyedaea lippioides* Baker in Mart., Fl. Bras. 6(3):208. 1884. *Dimerostemma lippioides* (Baker) Blake, Contr. Gray Herb. n.s. 52:14. 1917. BRAZIL: Distrito Federal: Bacia do Rio São Bartolomeu, cerrado às margens da rodovia DF 15. *Heringer, Filgueiras, Mendonca & Pereira 6369*; Goiás: Portelandia. *Hatschbach 34239*; 20 km N of Corumbá de Goiás on road to Niquelândia, in valley of Rio Corumbá, elev. ca. 1150 m. *Irwin, Maxwell & Wasshausen 18790*; Cerrado ca. 35 km NE of Catalão, elev. 900 m. *Irwin, Onishi, da Fonsêca, Souza, Reis dos Santos & Ramos 25266*; 12 km S of Alto Paraíso de Goiás, along road to São João da Aliança, elev. 3400 ft. *King & Bishop 8865*; 20 km N of Cristalina along road to Brasília, elev. 2200 ft. *King & Bishop 8946*; Minas Gerais: Serra do Espinhaço, about 8 km N of Gouveia on road to Diamantina, elev. 1220 m. *Anderson, Stieber & Kirkbride 35273*; Ca. 4 km W of Campos Altos along Highway 262 to Uberaba, elev. 1160 m. *Davidse & Ramamoorthy 10860*; Morro das Pedras, ca. 25 km NE of Patrocinio, elev. 1050 m. *Irwin, Onishi, da Fonsêca, Souza, Reis dos Santos & Ramos 25502*; Serra do Espinhaço, 13 km E of Diamantina, elev. 1000 m. *Irwin, da Fonsêca, Souza, Reis dos Santos & Ramos 27510*; Serra do Espinhaço, 3 km N of São João da Chapada, road to Inhai, elev. 1200 m. *Irwin, da Fonsêca, Souza, Reis dos Santos & Ramos 28463*; 10 km S of Diamantina, elev. 3600–4000. *King & Bishop 8541*; 75 km SE along road from Cristalina to Paracatu, elev. 2400 ft. *King & Bishop 8979*; Araxá, Barreiro?. *Macedo 3138*; Caldas. *Widgren s.n.*; Morro das Pedras, near Belo Horizonte. *Williams & Assis 5999.*

Blake (1917) was convinced that *D. brasilianum* and *D. lippioides* were separate species, so much so that he had difficulty understanding where Cassini had obtained his type material of a species that Blake considered to be restricted to Goiás in the interior of Brazil. A careful review of the material now available shows that *D. lippioides* is at best a form with somewhat larger heads in eastern Minas Gerais and according to literature and photographs in eastern São Paulo. There

seems to be no significant discontinuity between such eastern specimens and material with smaller heads occurring as far east as central Minas Gerais.

Dimerostemma episcopale (H. Robinson) H. Robinson, comb. nov.

Oyedaea episcopalis H. Robinson, Phytologia 49:276. 1981. BRAZIL: Bahia: 14 km NW from the town of Rio das Contas along road to Pico das Almas, elev. 3300 ft. *King & Bishop 8633* (Holotype UB, isotype US). Additional specimens: BRAZIL: Bahia: 12–14 km N of town of Rio das Contas on the road to Mato Grosso, elev. ca. 1200 m. *Harley, Renvoize, Erskine, Brighton & Pinheiro 15163A*; Lower northern slopes of the Pico de Almas, ca. 25 km WNW of the town of Rio de Contas, elev. 1500 m. *Harley et al., 15402*; Ca. 3 km south of small town of Mato Grosso on the road to Vila do Rio de Contas, elev. ca. 1200 m. *Harley, Mayo, Storr, Santos & Pinheiro 19936.*

For notes on distinctions from the closest relative see the discussion under the following species.

Dimerostemma grazielae H. Robinson, sp. nov.

Plantae fruticosae plerumque ad 1.5 m altae mediocriter ramosae. Caules rufo-brunnescentes subteretes dense hirtelli vel antrorse scabridi, internodis plerumque 1.5–5.0 cm longis. Folia opposita, petiolis distaliter indistincte demarcatis ca. 0.5–1.0 cm longis; laminae ellipticae vel ovatae plerumque 2.5–7.0 cm longae et 1.0–4.0 cm latae base acuminatae margine dense serrulatae vix anguste reflexae apice acutae vel breviter acutae supra atro-virides subbullatae dense antrorse scabridae subtus pallidae dense hispidulo-subtomentosae et glandulo-punctatae in nervis et nervulis dense exsculpto-reticulatae, nervis ascendentiter pinnatis vel supra basem subtrinervatis. Inflorescentiae plerumque multi-capitatae, pedunculis plerumque 2–4 cm longis raro ca. 6 cm longis dense antrorse pilosis vel lanatis et glandulo-punctatis. Capitula ad 1.5–2.0 cm lata (radiis exceptis); bracteae involucri 12–14 exteriores patentes foliiformes linearis 10–20 mm longae et 1–2 mm latae margine reflexae, bracteae 10–14 interiores appressae oblongae ca. 6 mm longae et 2.3 mm latae margine scariosae apice breviter cuspidatae extus ad medio scabridae vel breviter lanatae et glandulo-punctatae; paleae cum bracteis interioribus similes apice distincte apiculatae. Flores radii 16–20 steriles; corollae flavae extus dense glandulo-punctatae, tubis ca. 1.5 mm longis superne sparse pilosulis, limbis anguste ellipticis ca. 10–12 mm longis et 3 mm latis; achaenia radii triangularia ca. 2.5 mm longa apice tridenticulata interdum in aristis 1–2 ad 0.5 mm longis producta. Flores disci ca. 70 in capitulo; corollae sordido-flavae 5.0–5.5 mm longae extus inferne glabrae, tubis brevibus ca. 1 mm longis, faucibus cylindricis ca. 3.5 mm longis base abrupte campanulatis, lobis ca. 0.9 mm longis et 0.7 mm latis intus praeter basem breviter papillosis extus scabridis et sparse glandulo-punctatis; filamenta in partibus superioribus ca. 0.5 mm longa; thecae antherarum nigrescentes ca. 2.7 mm longae; appendices antherarum nigrescentes late ovatae ca. 0.3 mm longae et 0.25 mm latae extus multo glanduliferae; rami stylorum abaxialiter multo glanduliferi apice in acuminis breviter appendiculatae, lineis stigmataceis adaxialibus contiguis; achaenia disci complanata ca. 4.0–4.5 mm longa et ca. 1.5 mm lata (ala excepta) margine distincte integriter pallide alata in superficiis lateralibus inferne glabra superne sparse pustulifera apice breviter bi-

dentata et in marginis lateralibus multo minute squamulifera. Grana pollinis in diametro ca. 25–27 μm.

TYPE: BRAZIL: Goiás: Chapada dos Veadeiros, ca. 19 km N of Alto do Paraíso, cerrado on steep rocky slopes, surrounded by campo, outcrops, elev. ca. 1250 m. Shrub ca. 1.5 m tall. Ligules yellow; discs yellow-brown. 29 Mar 1971. *H. S. Irwin, R. M. Harley & G. L. Smith 32779* (Holotype UB; isotypes NY, US). PARATYPES: BRAZIL: Goiás: Chapada dos Veadeiros, ca. 20 km W of Veadeiros, Rocky slopes and wet campo, elev. 1000 m. Shrub ca. 1 m tall. Rays and disc yellow. 11 Feb 1966. *Irwin, Grear, Souza & Reis dos Santos 12608* (NY); Ca. 7 km W of Veadeiros, Burned-over campo, elev. ca. 950 m. Frequent. Shrub ca. 1.5 m. Heads nodding; rays yellow; disc yellow-brown. 15 Feb 1966. *Irwin et al. 12903* (US); Ca. 42 km N of Alto do Paraíso. Riacho margin in cerrado. Cerrado on rocky slopes and adjacent campo, elev. ca. 1250 m. Subshrub to ca. 2.5 m tall. Ligules yellow; disc yellow-brown. 25 Mar 1971. *Irwin, Harley & Smith 33151* (US).

Dimerostemma grazielae is closely related to the preceding *D. episcopale* which has a similar habit and which occurs in very similar but disjunct crystalline rock habitats in the state of Bahia to the east. The new species is easily distinguished by the long narrow outer involucral bracts with recurved margins that greatly exceed the length of other parts of the head. The plants of the new species also tend to have a more branched inflorescence with more heads on shorter peduncles. More detailed differences include the paleae of the head having distinctly pointed rather than rounded tips, the punctate glandular hairs having a much more prominent apical cell, and the stigmatic lines of the style branches being contiguous with almost no evidence of the longitudinal division characteristic of other members of the genus. The Bahian species has the broad central groove between its stigmatic lines and has the stalk cells of the glandular hairs much more prominent with a very tenuous apical cell. Collection data on one specimen indicates the heads are nodding, but the consistency of the character is not known.

Dimerostemma humboldtianum (Gardn) H. Robinson, comb. nov.

Viguiera humboldtiana Gardn., Lond. J. Bot. 7:398. 1848. *Oyedaea humboldtiana* (Gardn) Benth. ex Baker in Mart., Fl. Bras. 6(3):206. 1884. BRAZIL: Goiás: Arid upland Campos near Nossa Senhora d'Abadia. *Gardner 4239* (Isotype US). Additional specimens: BRAZIL: Goiás: Distrito Federal: Burned-over cerrado between Brasília and Sobradinho, elev. 1000 m. *Irwin, Souza & Reis dos Santos 9193*; Cerrado em frente ao Zoobotânico. *Sucre 874.*

The species represents a comparatively glabrous element in the genus. The closest relative is evidently *D. annuum* which has much narrower leaves and comparatively longer outer involucral bracts.

Dimerostemma retifolium (Sch. Bip.) Blake,
Contr. Gray Herb, n.s. 52:11. 1917

Viguiera? retifolia Sch. Bip. ex Baker in Mart., Fl. Bras. 6(3):223. 1884. BRAZIL: Mato Grosso: Fields along the Rio Pardo. *Riedel* (Holotype K, photo US).

Material of the species has not been seen. The species was transferred to *Dimerostemma* by Blake, and the key characters given here are those of Blake (1917).

The species appears to belong to the more typical element of the genus, but the leaves are less densely pubescent than any other members of that series.

Dimerostemma rotundifolium (Baker) Blake,
Contr. Gray Herb. n.s. 52:13. 1917

Oyedaea rotundifolia Baker in Mart., Fl. Bras. 6(3):208. 1884. BRAZIL: São Paulo: near San Carlos. *Riedel 1852* (Lectotype selected by Blake 1917, G; isolectotypes K, P; photo & frag. US). Additional specimens: BRAZIL: Minas Gerais: Belo Horizonte, Villa Independencia. *Barreto 2292*; Serra do Curral, municipio de Belo Horizonte. *Magalhães 1509.*

The specimens cited all show slender acuminate tips on the paleae of the heads that are not seen on the closely related *D. brasilianum.*

Dimerostemma vestitum (Baker) Blake,
Contr. Gray Herb. n.s. 52:11. 1917

Oyedaea vestita Baker in Mart., Fl. Bras. 6(3):207. 1884. BRAZIL: Goiãs: Fields near Goiás. *Burchell 6815* (Lectotype K, photo US). Additional specimens: BRAZIL: Distrito Federal: Reserva Ecológica do IBGE. *Heringer et al. 5897*; Taguatinga. *Heringer et al. 16731*; Cerrado and gallery forest, immediately E of Lagôa Paranoá, elev. 975 m. *Irwin, Souza & Reis dos Santos 11165*; Cerrado, summit of Chapada da Contagem, elev. 1100 m. *Irwin et al. 11678*; 46 km N of the bridge at Asa Norte in Brasília on the dirt road to Vila Buritis, elev. 3100 ft. *King & Almeda 8219*; Chapada da Contagem. 19.5 km NNW of central Brasília, elev. ca. 3400 ft. *King, Almeda & Eiten 8319*; Lado norte de vale de Ribeirão Bananal, elev. 1060 m. *Kirkbride 3183*; Na região de Barra Alta, este do Córrego São Gonçalo, elev. 950 m. *Kirkbride 3891a*; Goiás: Campo and cerrado, sandstone summit, Serra Dourada, ca. 20 km SE of Goiás Velho, elev. 800 m. *Irwin, Souza & Reis dos Santos 11836*; Serra dos Cristais, ca. 10 km W of Cristalina, elev. 1200 m. *Irwin, Grear, Souza & Reis dos Santos 13556*; Serra do Morcêgo, Côrrego Estreme, ca. 42 km NE of Formosa, elev. 800 m. *Irwin et al., 15141*; Serra dos Pirineus, 15 km N of Corumbá de Goiás on road to Niquelândia, in valley of Rio Corumbá, elev. ca. 1150 m.

The species seems closest to the sympatric *D. asperatum* in its few or solitary large heads. As indicated by the name, the species has a distinctive dense pubescence on its leaves and outer involucral bracts, but almost all the specimens can be distinguished more easily by the branches that bear leaves nearly or completely up to the bases of the heads.

Dimerostemma virgosum H. Robinson, sp. nov.

Plantae fruticosae ca. 0.7–1.0 m altae multo plerumque pseudodichotome ramosae. Caules pallide brunnescentes teretes antrorse strigosi, internodis ad 10 cm longis in ramis sensim sub 1 cm longis. Folia opposita, petiolis prebrevibus ca. 1 mm longis distaliter indistincte demarcatis; laminae ovato-lanceolatae plerumque 2.0–8.5 cm longae 0.7–1.9 cm latae base late cuneatae margine minute interdum remote serrulatae apice anguste acutae fere ad basem ascendentiter trinervatae supra dense pilosulae persparse glandulo-punctatae subtus dense subvelutinae multo glandulo-punctatae in nervis primariis et secundariis dense

strigosae. Inflorescentiae in ramis terminales unicapitatae, pedunculis 1.5–8.5 cm longis antrorse strigosis. Capitula ad 10–12 mm alta et lata (bracteae et flores radii excepta); bracteae involucri exteriores ca. 8 late patentes oblongae 5–12 mm longae et 2.5–4.0 mm latae supra dense scabridulae subtus leniter pallidiores dense scabrido-pilosulae, bracteae interiores ca. 17 anguste ovatae ca. 5 mm longae et inferne 1.5 mm latae apice anguste acutae vel acuminatae extus planae persparse vel mediocriter breviter pilosulae superne glandulo-punctatae; paleae bracteis interioribus similes superne margine scabridulae apice indurate anguste acutae extus ad medio distincte alatae. Flores radii ca. 17 steriles; corollae flavae extus dense glandulo-punctatae, tubis ca. 1 mm longis infundibularibus puberulis et superne scabrido-pilosulis, limbis linearibus ca. 15 mm longis et 3 mm latis margine in sinis interioribus dense puberulis in nervis pilosulis; achaenia radii minute triangularia ca. 1.5 mm longa apice truncata. Flores disci ca. 90 in capitulo; corollae flavae ca. 4 mm longae extus plerumque glabrae, tubis ca. 0.4–0.8 mm longis, faucibus cylindricis ca. 2.5 mm longis base subabrupte campanulatis, lobis ca. 0.8 mm longis et 0.6 mm latis intus praeter basem breviter papillosis extus sparse glandulo-punctatis; filamenta in partibus superioribus ca. 0.4–0.5 mm longa; thecae antherarum nigrescentes ca. 1.7 mm longae; appendices antherarum flavae ovatae ca. 0.5 mm longae et 0.3 mm latae extus multo glanduliferae; rami stylorum abaxialiter et scapi stylorum apice multo glanduliferi, lineis stigmataceis adaxialibus distincte non-contiguis; achaenia disci complanata ca. 3 mm longa et 1.2–1.4 mm lata margine irregulariter lobato-alata base anguste cuneata superne in superficiis lateralibus sparse pustulifera apice truncata et dense minute scabridula. Grana pollinis in diametro ca. 25–27 μm.

TYPE: BRAZIL: Mato Grosso do Sul: Mun. de Ladário, pantanal. Subarbusto da parte seca, capítulo amarelo, bem ramoso, ocorre formando populações. 8 Nov 1982. *J. Elias de Paula & Claudio A. Conceição* (Holotype IBGE; isotype US).

The pale stems with pseudodichotomous branching and the narrowly ovate leaves with narrowly acute tips are unique in the genus. The shape of the disk corollas, the paleae with a narrow vertical median wing, and the contorted glanduliferous branches of the style, however, are thoroughly characteristic of the genus. The achene seems to have neither awns nor squamellae, but the minute scabrae of the truncated apical surface might be mistaken by some for vestigial squamellae. The species occurs in a comparatively isolated location in the pantanal along the Paraguayan border.

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Department of Botany, National Museum of Natural History, Smithsonian Institution, Washington, D.C., 20560.